

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) Method for synthesizing endohedral fullerenes [[it]]
in an arc reactor, comprising:

providing an atmosphere to said reactor; and

burning off graphite electrodes in an said atmosphere, wherein said atmosphere comprises an inert gas or gas mixture with which contains a reactive gas component , and providing said reactive gas component with , said reactive gas component comprising at least two elements in an inert gas or inert gas mixture.

2. (Previously Presented) The method of claim 1, wherein the inert gas or the inert gas mixture includes 5% by volume to 60% by volume of reactive gas component.

3. (Previously Presented) The method of claim 1, wherein the inert gas or the inert gas mixture includes 5% by volume to 10% by volume of reactive gas component.

4. (Previously Presented) The method of claim 1, wherein the inert gas or inert gas mixture includes a nitrogen-containing or carbon-containing reactive gas component.

5. (Currently Amended) The method of claim 1, wherein the reactive gas component includes ammonia or methane or other hydrocarbons.

6. (Previously Presented) The method of claim 1, wherein the reactive gas component is supplied to the arc reactor from outside during the burning off or is generated in the arc reactor.

7. (Previously Presented) The method of claim 1, wherein graphite electrodes are used which are modified with metal or metal oxides.

8. (Previously Presented) The method of claim 7, wherein the graphite electrodes which are used are modified with holmium or scandium or their oxides.

9. (Previously Presented) The method of claim 1, wherein the graphite electrodes which are used are modified with metal or metal oxides and a nitrogen-containing substance.

10. (Currently Amended) Method for synthesizing endohedral fullerenes in an arc reactor, comprising:
providing an atmosphere to said reactor; and
burning off graphite electrodes in said atmosphere, wherein
said atmosphere comprises an inert gas or gas mixture with a reactive gas component, said reactive gas component comprising at least two elements, and
~~The method of claim 1, wherein the graphite electrodes which are used are modified~~
with metal cyanamide.

11. (Currently Amended) The method of claim ~~[[1]]~~10, wherein the metal cyanamide comprises ~~graphite electrodes which are used are modified with calcium cyanamide or lead cyanamide.~~

12. (New) The method of claim 1, wherein the inert gas or inert gas mixture includes an ammonia or carbon-containing reactive gas component.

13. (New) The method of claim 1, wherein the inert gas or inert gas mixture includes a carbon-containing reactive gas component.

14. (New) Method for synthesizing endohedral fullerenes in an arc reactor, comprising:

providing an atmosphere to said reactor; and

burning off graphite electrodes in said atmosphere, wherein said atmosphere comprises an inert gas or gas mixture with a reactive gas portion, said reactive gas portion comprising ammonia or a carbon-containing component.

15. (New) The method of claim 14, wherein said reactive gas portion comprises a carbon-containing component.

16. (New) The method of claim 1, wherein the reactive gas component is generated in the arc reactor.